

Port Mobil Terminal

EPA ID Number: NYD000824516

Other (Former) Names of Site

Mobil Oil Corporation, Exxon Mobil

Site Description

Port Mobil Terminal is located at 4101 Arthur Kill Road, on Staten Island, New York. The facility is bounded to the North and West by the Arthur Kill River, residential and industrial areas (Charleston section) in the South, and the Clay Pit Pond State Park Preserve to the East. The facility covers approximately 200 acres, of which 120 acres are used for site operations. Port Mobil Terminal began operations as a bulk storage facility in 1934 and this continues today.

Port Mobil stores about 70% gasoline and 30% other fuels with a storage capacity of 125 million gallons and an annual handling of 1.5 billion gallons of oil per year (1990). Waters within Arthur Kill are designated by New York State Department of Environmental Conservation (NYSDEC) as SD Class (saline surface water) with restricted use (mostly fishing). The nearest drinking water well is 10 miles away. For purposes of investigation and remediation, the facility was divided into 3 remedial areas, the Bulkhead area, the Tank Farm area, and the SI/North Beach Area.

Additionally, the facility maintains and operates an above ground piping network to transfer petroleum products throughout the operating portion of the site. Until 1993, Mobil has provided barge emptying services, and resulting wastewater was stored in the surface impoundments. There are 60 aboveground storage tanks, a wastewater treatment plant, and two Resource Conservation and Recovery Act (RCRA)-regulated surface impoundments.

Site Responsibility and Legal Instrument

The Resource Conservation and Recovery Act (RCRA) Program of EPA Region 2 has the responsibility to ensure corrective action at the facility. On October 2, 1995, EPA issued a 3013 Order to conduct a soil and groundwater investigation of the site and to assess the impact of contamination migrating into the Arthur Kill River. The Order also requires that Mobil demonstrate to EPA that it has correctly installed and is maintaining a groundwater monitoring system around the surface impoundments.

Permit Status

A Part B permit application was submitted on September 25, 1991. Shortly thereafter, Port Mobil Terminal claimed it did not handle any hazardous wastes in the surface impoundments. Sampling conducted by EPA in March and April 1993 confirmed the generation of hazardous waste in violation of RCRA regulations, which has triggered a lawsuit by the US Department of Justice (on behalf of EPA) against the facility.

Port Mobil lost interim status in 1994. The lawsuit was settled with the payment of a penalty of \$8,200,000 and an additional \$2,000,000 in a Land Acquisition and Environmental Restoration Project, in early 2002. The two surface impoundments were closed in late 2001, and an acceptable Closure Certification Report was submitted by Mobil in March 2002.

Potential Threats and Contaminants

Results of investigations at the site indicate that the soils and groundwater have been impacted by petroleum hydrocarbons (gasoline and fuel oil distillates) and inorganic compounds in several hot spots. The primary compounds of concern include benzene, total BTEX (benzene, toluene, ethylbenzene, and xylenes), total polycyclic aromatic hydrocarbons (such as naphthalene), and lead.

During the site investigation, light non-aqueous phase liquid (LNAPL) was detected and determined to pose an immediate threat to the Arthur Kill. There was LNAPL present in four wells and five borings near the former Southern Recovery System and the northern portion of the facility. Ten more wells had concentrations of benzene above 1,000 ppb in different portions of the bulkhead area. Similarly, there is soil and groundwater contamination focused in several hot spots in the Tank Farm area.

On February 21, 2003, an explosion occurred at the facility. Although most of the releases resulting from this explosion were either burned or contained, and subsequently cleaned up by Mobil, the heat generated by the nearby fire destroyed the petroleum light non-aqueous phase liquid (LNAPL) recovery systems.

Other areas affected by the explosion were as follows:

- The Tank 48 piping system was damaged and this resulted in the release of petroleum products.
- The barge explosion occurred in the Ship Berth No. 1A area, which is located in the southwestern corner of the facility potentially affecting the soils and groundwater. A soil and groundwater investigation was completed in this area on July 2003. Mobil has also sampled groundwater wells located adjacent to this area to monitor for potential LNAPL impact.
- Gasoline was released from the damaged Barge Berth No. 2 area where a section of the aboveground piping ruptured.

Cleanup Approach and Progress

A Resource Conservation and Recovery Act (RCRA) Facility Investigation (RFI) was completed in 1997, and the Interim Corrective Measures (ICM) started the same year. Both ICM and RFI progress reports are submitted to EPA on a quarterly basis. As part of the ICM, Mobil operates a thermal recovery system in the bulkhead and siphon building areas bordering the Arthur Kill.

In late 1998, Mobil conducted a large soil excavation near the siphon building area along with the installation of an additional recovery well to address the light non-aqueous phase liquid discovered in this area. Product thickness in wells has generally declined since system start-up.

Mobil has implemented a hot spot remediation in Tank 41, and the Former Southern Recovery Area. At Tank 41, Mobil removed about 2,200 tons of petroleum impacted soils from two large hot spots. EPA has evaluated the potential ecological risk at the facility, and found it to be within acceptable levels.

Port Mobil is already implementing a site-wide Corrective Measure Studies (CMS) Work Plan, and the sampling for the monitored natural attenuation program has been completed. A CMS Report was submitted on April 26, 2002.

Impacted soil from the Interim Corrective Measures (ICM) and Tank 48 areas was removed in 2003. Areas damaged by the February, 2003 explosion, have also been remediated. Mobil has implemented interim corrective measures in each of these impacted areas, and submits quarterly progress reports.

Repositories

Copies of supporting technical documents and correspondence cited in this site fact sheet are available for public review at:

US Environmental Protection Agency, Region 2
RCRA Records Center
290 Broadway, 15th Floor
New York, NY 10007-1866

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